



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,965	03/31/2004	Clifford Earl Shamblen	129955/11854 (21635-0122)	8707
31450 7590 02/25/2009 MCNEES WALLACE & NURICK LLC 100 PINE STREET P.O. BOX 1166 HARRISBURG, PA 17108-1166			EXAMINER MCGUTHRY BANKS, TIMA MICHELE	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 02/25/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<i>Office Action Summary</i>	Application No.	Applicant(s)	
	10/814,965	SHAMBLEN ET AL.	
	Examiner	Art Unit	
	TIMA M. MCGUTHRY-BANKS	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,4,5 and 8-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Allowable Subject Matter*

The indicated allowability of claims 8-10 is withdrawn in view of the newly discovered reference(s) to Application No. 11/059,715 in view of Shamblen et al (US 6,926,754 B2) and U.S. Patent No. 6,884,279 in view of Shamblen et al. Rejections based on the newly cited reference(s) follow.

### *Status of Claims*

Claim 1 is amended, Claims 2, 3, 6, 7 and 24-29 are cancelled, Claims 4, 5, 8-16, 18, 19, 21 and 22 are as originally filed and Claims 17, 20 and 23 are as previously presented.

### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4, 5 and 11-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al (US 2002/0005089) in view of Peras (US 3,234,608) and Goecmen et al (US 2002/0003008 A1).

Nagata et al in view Peras is applied as discussed in the office action mailed 9 April 2008 for Claims 1 (which now incorporates canceled Claim 7), 11, 13, 15, 16 and 18. Nagata et al in view of Peras and Goecmen et al is applied as discussed in the office action mailed 9/24/2008.

*Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 8-15 and 18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 9-19 and 23 of copending Application No. 11/059,715 in view of Shamblen et al (US 6,926,754 B2). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present invention claims a metallic base selected from the group consisting of nickel, cobalt, iron, iron-nickel, and iron-nickel-cobalt and mixture thereof, and application ‘715 claims a metallic constituent. Additionally, Application ‘715 does not claim that the metallic article is a component of a gas turbine engine as in Claim 1.

Shamblen et al teaches that superalloys have wide application in the aircraft propulsion industry. They are fabricated by any of a number of techniques, such as refining metal-containing ores to produce molten metal, which is thereafter cast. Elements and combinations

Art Unit: 1793

of elements may take many intermediate forms before being melted to form the final alloy. The metal is refined as necessary to remove or reduce the amounts of undesirable minor elements. The composition of the refined metal may also be modified by the addition of desirable alloying elements. These refining and alloying steps may be performed during the initial melting process or during remelting. After a superalloy of the desired composition is produced, it may be used in the as-cast form or further worked. Further processing such as joining, heat treating, machining, surface coating and the like may be employed. All of these forms involve melt processing (column 1, lines 13-41). Though the preferred embodiment of Shamblen et al favors not using the melting process (e.g. column 3, line 42), Shamblen et al nonetheless teaches using a melt process. According to MPEP § 2141.03, a prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the metallic article of Application '715 could be used as a component of a gas turbine, since Shamblen et al teaches that superalloys can be produced to form gas turbine parts.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 8, 9 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3 and 11-13 of U.S. Patent No. 6,884,279 in view of Shamblen et al (US 6,926,754 B2). The patented claims do not specifically teach that the metallic article is a nickel-base superalloy, a cobalt-base superalloy, an iron-base superalloy, an iron-nickel-base superalloy, an iron-nickel-cobalt-base superalloy, or martensitic steel or that the article is a component of a gas turbine engine as in Claim 1.

Shamblen et al teaches that superalloys have wide application in the aircraft propulsion industry. They are fabricated by any of a number of techniques, such as refining metal-containing ores to produce molten metal, which is thereafter cast. Elements and combinations of elements may take many intermediate forms before being melted to form the final alloy. The metal is refined as necessary to remove or reduce the amounts of undesirable minor elements. The composition of the refined metal may also be modified by the addition of desirable alloying elements. These refining and alloying steps may be performed during the initial melting process or during remelting. After a superalloy of the desired composition is produced, it may be used in the as-cast form or further worked. Further processing such as joining, heat treating, machining, surface coating and the like may be employed. All of these forms involve melt processing (column 1, lines 13-41). The superalloy includes a nickel-base, cobalt-base, iron-base, iron-nickel-base, or iron-nickel-cobalt-base alloy (column 3, lines 65-67). Though the preferred embodiment of Shamblen et al favors not using the melting process (e.g. column 3, line 42), Shamblen et al nonetheless teaches using a melt process. According to MPEP § 2141.03, a prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention. It would have been obvious to one of ordinary skill in the art practicing the invention claimed in the '279 patent to use nonmetallic constituents that would produce the claimed superalloy in the process of instant Claim 1, since Shamblen et al teaches that such superalloys can be produced to form gas turbine parts.

*Response to Arguments*

In the response filed 12/22/2008, Applicant states that Claim 1 was amended to incorporate a Markush group listing the reduction steps of Claims 8-10. However, the Markush group includes the limitation of cancelled Claim 7 and not of Claim 8, so the present Markush group includes subject matter that was rejected in the previous office action. Applicant also argues that Nagata fails to teach producing an initial metallic particle that is the same as that resulting according to Applicant's claimed invention. However, applicant has not provided any position to which the examiner can respond, and the examiner maintains that the prior art reads on the claimed invention.

In the response filed 7/9/2008, applicant argues that the non-statutory obviousness-type double patenting rejections are rendered moot because of the incorporation of the limitation of Claim 28 into Claim 1. However, the examiner has applied new double patenting rejections to address this incorporation.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMA M. MCGUTHRY-BANKS whose telephone number is (571)272-2744. The examiner can normally be reached on M-F 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Wyszomierski/  
Primary Examiner  
Art Unit 1793

/T. M. M./  
Examiner, Art Unit 1793  
25 February 2009